

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below.

1. (Previously Presented) A system comprising an alignment device for aligning at least one apparatus with respect to a surface of a tissue, the alignment device comprising a tissue interface member suitable for positioning on the surface of the tissue and mating with the apparatus to maintain alignment of the apparatus during an operation of the apparatus, the alignment device further comprising a removable energy absorbing layer attached to the tissue interface member, wherein the energy absorbing layer is responsive to energy directed thereon to heat up and to conductively transfer heat to the surface of the tissue to ablate the tissue to cause tissue ablation, and wherein the apparatus is an energy emitter apparatus including at least one energy source for emitting energy, wherein the energy emitter apparatus includes at least one alignment member that mates with the tissue interface member to achieve alignment with the tissue, so that, when the heat is transferred to the tissue, the layer may be removed to expose the ablated tissue.

Claim 2. is cancelled.

3. (Previously Presented) The system of claim 1, wherein the energy absorbing layer further comprises a first and a second side, wherein the second side comprises adhesive material disposed thereon for adhering to the surface of the tissue.

4. (Currently Amended) The system of claim 1 2, wherein the alignment device has an inner periphery, wherein the energy absorbing layer includes a separation line adjacent the periphery, and wherein the energy absorbing layer is removable from the tissue interface member after tissue ablation.

5. (Previously Presented) The system of claim 1, wherein the tissue interface member mates with a first apparatus that emits energy to the energy absorbing layer to cause tissue ablation and with a second apparatus suitable for detecting a characteristic in a fluid collected from the tissue.
6. (Withdrawn) The alignment device of claim 1, wherein the tissue interface member comprises of at least one clip that mates with a surface on the apparatus to hold the apparatus with respect to the tissue interface member.
7. (Withdrawn) The alignment device of claim 6, wherein the clip is biased to hold the first apparatus and second apparatus under tension.
8. (Previously Presented) The system of claim 1, wherein the tissue interface member has an exterior and an interior surface.
9. (Previously Presented) The system of claim 8, wherein interior surfaces of the tissue interface member engage with surfaces of the apparatus to align the apparatus with the tissue interface member.
10. (Withdrawn) The alignment device of claim 8, wherein the exterior surfaces of the tissue interface member engage with surfaces of the apparatus to align the apparatus with the tissue interface member.
11. (Withdrawn) The alignment device of claim 8, wherein the tissue interface member comprises a male alignment member or a female alignment member that mates with a complementary female alignment member or a male alignment member, respectively, on the apparatus.
12. (Withdrawn) The alignment device of claim 1, wherein the tissue interface member comprises at least one magnetic surface portion to mate with at least one complementary magnetic surface portion on the apparatus.

13. (Withdrawn) The alignment device of claim 1, wherein the tissue interface member comprises a threaded member that mates with a complementary threaded member on the apparatus.

14. (Previously Presented) The system of claim 1, wherein the tissue interface member further comprises an adhesive element allowing the device to be attached to the surface of tissue to maintain alignment of the apparatus with respect to the surface of the tissue.

15. (Previously Presented) The system of claim 1, wherein the tissue interface member comprises a strap that extends around a body portion of a user to mount and hold the tissue interface member to the surface of the tissue at a desired position to maintain the alignment of the apparatus with respect to the surface of the tissue.

16. (Previously Presented) The system of claim 1, further comprising a sensor to detect a characteristic of a biological fluid collected from the tissue, wherein the sensor comprises at least one alignment element that mates with the tissue interface member to achieve alignment of the sensor over a portion of the ablated tissue with the tissue.

Claim 17 is cancelled.

18. (Previously Presented) The system of claim 1, wherein the energy emitter apparatus further comprises a controller and a sensor coupled to the controller, wherein the sensor detects when the energy emitter apparatus is in position on the tissue interface member, and wherein the controller is responsive to the sensor to enable activation of the energy emitter apparatus.

19. (Previously Presented) The system of claim 18, wherein the sensor on

the energy emitter apparatus comprises a pressure sensor responsive to sufficient pressure from engagement with the tissue interface member.

20. (Previously Presented) The system of claim 19, wherein the energy emitter apparatus further comprises a switch that is closed by an element on the tissue interface member when the energy emitter apparatus is properly installed in the tissue interface member, wherein the controller of the energy emitter apparatus is responsive both to the switch being closed and the pressure sensor detecting sufficient pressure to enable activation of the energy emitter apparatus.

21. (Withdrawn) In combination, the alignment device of claim 1, and a tissue breaching device for mechanically breaching the tissue and forming at least one opening therein, wherein the tissue breaching device comprises at least one alignment member that mates with the tissue interface member to achieve alignment with the tissue.

22. (Withdrawn) In combination, the alignment device of claim 1, and a tissue breaching device comprising a heatable element for breaching the surface of the tissue by thermally ablating the tissue to form at least one opening therein, wherein the tissue breaching device comprises at least one alignment member that mates with the tissue interface member to achieve alignment with the tissue.

23. (Currently Amended) A system comprising:
a tissue interface member suitable for positioning on the surface of the tissue;
a tissue breaching device that mates with the tissue interface member to achieve a desired alignment with the surface of the tissue, wherein the tissue breaching apparatus forms at least one opening in the tissue; and
a sensor device capable of mating to the tissue interface member when the tissue breaching device is not mated to the tissue interface member so that the sensor device is aligned with the at least one opening in to achieve alignment with an ablated site of the tissue, wherein the sensor device collects a biological fluid by the force of a pressure differential between the at least one opening and sensor device, and wherein the sensor

device detects a characteristic of a biological fluid collected from the at least one opening in the tissue , and,

wherein the tissue breaching device is capable of mating to the tissue interface member to achieve alignment and is selected from a group comprising of a device that mechanically breaches the tissue, a heatable element device that thermally ablates the tissue, and an energy emitter device capable of emitting energy that is directly absorbed by the tissue and;

wherein the system further comprising an energy absorbing layer attached to the tissue interface member, wherein the energy absorbing layer is responsive to energy directed thereon to heat up and to conductively transfer heat to the surface of the tissue to ablate the tissue, and wherein the tissue breaching device comprises the energy emitter device comprising at least one energy source for emitting energy to the energy absorbing layer.

24. (Cancelled)

25. (Cancelled)

26. (Currently Amended) The system of claim 23 25, wherein the energy absorbing layer is removable from the tissue interface member.

27. (Currently Amended) The system of claim 23 25, where in the energy absorbing layer comprises an adhesive on one surface thereof to attach at a desired location proximate to the surface of the tissue.

28. (Original) The system of claim 27, wherein the energy absorbing layer is simultaneously removed upon detachment of the tissue breaching apparatus. Claims 29 and 30 are cancelled.

31. (Previously Presented) The system of claim 23, wherein the sensor device draws biological fluid from the at least one opening under a suction force.

32. (Previously Presented) A method for detecting a characteristic of a biological tissue, comprising the steps of:

placing a tissue interface member at a desired position onto the surface of the tissue;

mating a tissue breaching apparatus to the tissue interface member to achieve alignment with the surface of the tissue;

activating the tissue breaching apparatus to form a breached tissue site;

detaching the tissue breaching apparatus from the tissue interface member ;

positioning an energy absorbing layer proximate to the surface of the tissue in alignment with the tissue interface member;

removing the energy absorbing layer; and

mating a sensor device to the tissue interface member to achieve alignment with the breached tissue site.

33. (Original) The method of claim 32, wherein the step of activating a tissue breaching device involves activating the device selected from a group comprising a mechanical device, an electrically heatable element device, or an energy emitter device.

34. (Previously Presented). The method of claim 33, wherein the step of activating the energy emitter device further comprises;

mating an energy emitter device to the tissue interface member to achieve alignment with the energy absorbing layer;

activating the energy emitter device to emit energy to the energy absorbing layer, wherein the energy absorbing layer is responsive to energy directed thereon to heat and conductively transfer heat to the surface of the tissue thereby ablating the tissue;

detaching the energy emitter device from the tissue interface member; and

simultaneously removing the energy absorbing layer as the energy emitter device is detached.

35. (Original) The method of claim 33, wherein the step of activating the energy emitter device causes the formation of at least one opening in the tissue.

36. (Original) The method of claim 35, and further comprising the step of detecting a characteristic of a biological fluid collected from the at least one opening in the tissue with the sensor device.

37. (Original) The method of claim 36, wherein the step of positioning the energy absorbing layer comprises adhering the energy absorbing layer to the tissue with an adhesive.

38. (Original) The method of claim 34, and wherein the step of placing the tissue interface member on the tissue is performed with the energy absorbing layer attached in a desired alignment to the tissue interface member.

39. (Original) The method of claim 34, and further comprising the step of removing the energy absorbing layer from the tissue interface member after the tissue is ablated.

40. (Original) The method of claim 34, and further comprising the step of simultaneously removing the energy absorbing layer from the tissue interface member together with detachment of the energy emitter device from the tissue interface member.

Claims 41 and 42 are cancelled.

43. (Previously Presented) A system comprising an alignment device for aligning a energy emitter apparatus with respect to a surface of a tissue, the alignment device comprising a tissue interface member suitable for positioning on the surface of the tissue and mating with the energy emitter apparatus to maintain alignment of the energy emitter apparatus during an operation of the energy emitter apparatus, the alignment device further comprising a removable energy absorbing layer attached to the tissue interface member, wherein the energy absorbing layer is responsive to energy directed thereon to

heat up and to conductively transfer heat to the surface of the tissue to ablate at least a portion of the tissue, wherein the energy emitter apparatus comprises at least one energy source for emitting energy and at least one alignment member that mates with the tissue interface member to achieve alignment with the tissue, and wherein, when heat is transferred to the tissue, the energy absorbing layer may be removed to expose the portion of the tissue that is ablated.

44. (Previously Presented) A system for poration and alignment comprising:

an energy emitter apparatus including at least one energy source for emitting energy; and

a tissue interface member suitable for positioning on a surface of a tissue and mating with the energy emitter apparatus to maintain alignment of the energy emitter apparatus with respect to the surface of the tissue during operation of the energy emitter apparatus,

wherein the energy emitter apparatus comprises at least one alignment member that mates with the tissue interface member to achieve alignment with the tissue and wherein the energy emitter apparatus further comprises a controller and a sensor coupled to the controller, wherein the sensor detects when the energy absorbing apparatus is in position on the tissue interface member, wherein the controller is responsive to the sensor to enable activation of the energy emitter apparatus, wherein the sensor on the energy emitter apparatus includes a pressure sensor responsive to sufficient pressure from engagement with the tissue interface member, wherein the energy emitter apparatus further comprises a switch that is closed by an element on the tissue interface member when the energy emitter apparatus is properly installed in the tissue interface member, and wherein the controller of the energy emitter apparatus is responsive both to the switch being closed and the pressure sensor detecting sufficient pressure to enable activation of the energy emitter apparatus.

45. (Previously Presented) A system comprising:

a tissue interface member suitable for positioning on a surface of a tissue;

a tissue breaching device that mates with the tissue interface member to achieve a desired alignment with the surface of the tissue, wherein the tissue breaching device is capable of mating to the tissue interface member to achieve alignment and comprises an energy emitter device capable of emitting energy that is directly absorbed by the tissue;

a sensor device capable of mating to the tissue interface member when the tissue breaching device is not mated to the tissue interface member to achieve alignment with an ablated site of the tissue, wherein the sensor device detects a characteristic of a biological fluid collected from the ablated site of the tissue; and

an energy absorbing layer attached to the tissue interface member, wherein the energy absorbing layer is responsive to energy directed thereon to heat up and to conductively transfer heat to the surface of the tissue to ablate the tissue; wherein the energy emitter device comprises at least one energy source for emitting energy to the energy absorbing layer.

46. (Previously Presented) A method for detecting a characteristic of a biological tissue, comprising: placing a tissue interface member at a desired position onto a surface of a tissue;

positioning an energy absorbing layer proximate to the surface of the tissue in alignment with the tissue interface member;

mating a tissue breaching apparatus to the tissue interface member to achieve alignment with the surface of the tissue and the energy absorbing layer, the tissue breaching apparatus comprising an energy emitting device;

activating the tissue breaching device to emit energy to the energy absorbing layer, wherein the energy absorbing layer is responsive to energy directed thereon to heat and conductively transfer heat to the surface of the tissue thereby ablating the tissue;

detaching the tissue breaching apparatus from the tissue interface member; removing the energy absorbing layer; and

mating a sensor device to the tissue interface member to achieve alignment with a breached tissue site.

47. (Previously Presented) The system of claim 1, wherein the at least one apparatus comprises a substance delivery device constructed and arranged for delivery of a substance to the ablated tissue, wherein the substance delivery device comprises at least one alignment element that mates with the tissue interface member to achieve alignment of the substance delivery device over a portion of the ablated tissue.

48. (Previously Presented) The system of claim 47, wherein the substance delivery device further comprises a controller and a sensor coupled to the controller, wherein the sensor detects when the substance delivery device is in position on the tissue interface member, and wherein the controller is responsive to the sensor to enable activation of the substance delivery device.

49. (Previously Presented) The system of claim 48, wherein the sensor on the substance delivery device comprises a pressure sensor responsive to sufficient pressure from engagement with the tissue interface member.

50. (Previously Presented) The system of claim 49, wherein the substance delivery device further comprises a switch that is closed by an element on the tissue interface member when the substance delivery device is properly installed in the tissue interface member, wherein the controller of the substance delivery device is responsive both to the switch being closed and the pressure sensor detecting sufficient pressure to enable activation of the substance delivery device.

Claims 51-57 is cancelled.